Key Messages about the RETI Phase 2A Report

Two major components of the Phase 2A Draft Report:

- Revised data on the renewable resources Competitive Renewable Energy Zones (CREZ) – identified in Phase 1
- Preliminary statewide conceptual transmission plan to access enough renewable energy to achieve California's 33% by 2020 renewable energy goal

Conceptual transmission plan:

- Assesses the relative value of transmission line segments in providing access to renewable resources and delivering it to customers.
- Base case scenario evaluates 108 network line segments, and groups them into:
 - Renewable Foundation Lines (23 line segments)
 - Renewable Delivery Lines (13 line segments)
 - Renewable Collector Lines (11 geographic groups of several segments each)
- Recommends Foundation Lines and Delivery Lines for immediate detailed study by CAISO and POUs to determine which are needed. These lines may represent "least-regrets" additions to the California transmission system, likely to be needed regardless of how demand for electricity changes, and when and where renewable generation develops.
- Utilizes existing transmission corridors for the majority of identified line segments.
- Presents an objective approach to conceptual transmission planning that allows for the involvement of a much broader range of stakeholders than have historically been engaged in the early stages of transmission planning:
 - Builds in environmental considerations from the first
 - Incorporates a wide range of stakeholder perspectives
 - Evaluates usefulness of line segments in carrying renewable energy.
- Does not provide the precise routing of lines, project-level environmental impact assessments, or information about power flows, congestion, or reliability that is needed before any actual transmission project would be permitted for construction.

Future RETI work will:

- Prioritize line segments within groups and evaluate other scenarios.
- Coordinate statewide transmission planning with development of the Desert Renewable Energy Conservation Plan required by Executive Order S-14-08, the Bureau of Land Management's Solar Programmatic Environmental Impact Statement, and other initiatives that will impact renewable generation and transmission development.

Key Messages about RETI

- California policies require substantial increases in the generation of electricity from renewable resources. Implementation of these policies requires extensive improvements to California's electric transmission infrastructure.
- The California Renewable Energy Transmission Initiative (RETI) is a statewide planning collaborative formed to identify the large-scale transmission projects necessary to meet state renewable energy and climate change goals. These transmission facilities are intended to access the most cost-competitive renewable resources and to minimize environmental impacts.
- The 29 members of the RETI Stakeholder Steering Committee represent electric utilities, renewable energy generators, state and federal agencies, environmental NGOs, counties, consumer and tribal representatives and other stakeholders.
- RETI is coordinated by the California Public Utilities Commission, California Energy Commission, California Independent System Operator Corporation, Northern California Power Agency, Southern California Public Power Authority, and Sacramento Municipal Utility District.

Frequently Asked Questions

■ What is RETI?

The California Renewable Energy Transmission Initiative (RETI) was formed jointly by the CPUC, CEC, CAISO and Publicly Owned Utilities in 2007. RETI is a statewide planning collaborative, formed to identify the large-scale transmission projects necessary to meet state renewable energy and climate change goals.

To do this, the first phase of RETI has identified areas of the state and adjoining regions having high densities of biomass, geothermal, solar and wind resources. These areas are referred to as Competitive Renewable Energy Zones (CREZ). RETI works to identify transmission projects to CREZ that can be developed at the least economic cost and with the least environmental impact, and which have the consensus support of a broad range of stakeholder interests.

RETI will complete its Phase 1 CREZ identification and ranking in December 2008. RETI Phase 2 focuses on conceptual transmission planning to identify transmission projects needed to deliver renewable energy to consumers in a reliable manner while minimizing stress on the environment. Phase 3 is intended to support the filing of applications to construct new transmission to renewable resource areas.

■ What is a CREZ?

A Competitive Renewable Energy Zone (CREZ) is a geographic area having a high

density of biomass, geothermal, solar and/or wind resources. Phase 1 of RETI has identified 30 such zones across the state, based around proposed or potential generating projects in close enough proximity to share transmission facilities to access them. CREZ identification considers the economic cost of developing generating projects in each zone, and the relative environmental concerns occasioned by such potential development. CREZ are sized to support competition among generators, in order to ensure that the electricity ultimately produced is available to utilities and consumers at competitive prices.

■ Who is Involved in RETI?

The Stakeholder Steering Committee (SSC) is RETI's primary working body. Its 29 members include transmission providers and utilities, both publicly-owned and investor-owned; wind, solar, geothermal and biomass generators; state and federal agencies; counties; environmental NGOs; and representatives of consumers, tribes, agriculture and the military. SSC members and their contact information is available on the RETI website: www.energy.ca.gov/reti. The SSC meets monthly, and forms work groups to complete specific tasks. Two key work groups are:

- The Environmental Work Group (EWG) developed the methodology used to rank CREZ on the basis of relative environmental concern. The EWG is co-chaired by the two representatives of environmental NGOs on the RETI SSC. More than 50 people and organizations participate in weekly EWG meetings.
- The Phase 1B Work Group reviews and provides stakeholder input into the technology and cost parameters used in the economic ranking methodology applied by Black & Veatch to identify CREZ.

The RETI Coordinating Committee includes the CPUC, CEC, CAISO and Publicly Owned Utilities. The Coordinating Committee ensures that the RETI effort stays on schedule and produces results that will help the state meet its goals.

The CPUC hired engineering firm Black & Veatch to provide analytical support to the RETI collaborative. The Center for Energy Efficiency and Renewable Technologies (CEERT) coordinates RETI work and facilitates SSC and Work Group meetings.

RETI's Plenary Stakeholder Group (PSG) includes all interested parties and the public. It meets periodically to provide input to the process and to review RETI progress.

■ How Do I Participate in RETI?

RETI actively seeks comment on its work, and there are several ways to participate. To be informed of all RETI activities, please join the list-serve on the RETI website: www.energy.ca.gov/reti. This will notify you when documents or meeting notices are posted on the website.

SSC and work group meetings are open to observers. RETI's Plenary Stakeholder Group is designed to provide comment and communicate interests and concerns directly to the Stakeholder Steering Committee. In between PSG meetings, the best way to communicate with RETI is to contact the SSC member or members representing your area of interest. SSC members and their contact information are listed on the RETI website.

■ What Does it Mean if a CREZ is Identified in My Community?

RETI has identified 29 CREZ across the state. Most of these are in east central and southeast California, with a few in northeast California. These 30 CREZ are ranked in terms of their cost-effectiveness and environmental factors and represent areas having biomass, geothermal, solar or wind development promise. Areas having higher ranked CREZ are thus candidates for the development of such generating plants, but there is no certainty that generating plants will actually be built in CREZ.

RETI will NOT supplant local agency permitting authority, CPUC transmission line permitting, or CEC siting and permitting authority. It will inform those processes with information and considerations representing consensus of a broad stakeholder group. Actual plant construction will depend on the demand for renewable energy, the ability of renewable generators to obtain necessary permits, and the permitting and construction of transmission facilities necessary to deliver power to consumers.

If generating plants are built, this will provide both construction jobs and permanent plant operation jobs in the area, and significant property tax revenue to the county. Plant construction will also bring environmental impacts, and the pressures inherent in any industrial development.

RETI will identify transmission facilities needed to integrate renewable energy generation from the highest ranking four-eight CREZ. These CREZ have a higher likelihood of having new transmission facilities built to access them, thus adding transmission line and substation construction to the impacts of generating plant construction. There is no certainty that transmission facilities will actually be constructed to any CREZ. Approval of applications to build such new transmission will follow the requirements of state and federal law.